What is claimed is:

1.   A method related to a mobile station for transferring user data in a wireless packet data network over a radio interface between the mobile station and a network element, wherein the method comprises the steps of:

5   -   at a certain protocol layer, receiving a first packet data message from an upper protocol layer, which first packet data message belongs to a first packet data protocol (PDP) context characterised by certain first connection information,

-    at said certain protocol layer, receiving a second packet data message
10   from an upper protocol layer, which second packet data message belongs to a second packet data protocol (PDP) context characterised by certain second connection information,

-    reordering said first packet data message and said second packet data message at said certain protocol layer according to a relative urgency of
15   transmission of said first and second packet data protocol (PDP) contexts, and

-    delivering said first packet data message and said second packet data message further from said certain protocol layer in reordered order.

2.   A method according to claim 1, wherein the steps of receiving the
20   first packet data message and receiving the second packet data message precede a step of configuring comprising further steps of:

-    generating packet data protocol (PDP) context activation messages for informing the network about the activation of packet data protocol (PDP) contexts for user data transmission, and

25   -   transmitting packet data protocol (PDP) context activation messages to the network to associate the packet data protocol (PDP) contexts to the first packet data message and to the second packet data message.

3.   A method according to claim 2, wherein the method comprises a step of requesting an uplink resource for transmitting said packet data protocol
30   (PDP) context activation messages.

4.   A method according to claim 3, wherein the method comprises a step of requesting an uplink Temporary Block Flow (TBF) for transmitting protocol activation packet data unit (PDU) messages.

5.   A method according to claim 4, wherein the step of receiving comprises a preliminary step of checking that said first packet data messages and said second packet data messages are received in-sequence order according said connection information of said first packet data message or said second packet data message.

6.   A method according to claim 5, wherein the first packet data message containing first user data belongs to first packet data protocol (PDP) context, and the second packet data message containing second user data belongs to second packet data protocol (PDP) context.

7.   A method according to claim 6, wherein said first and second user data comprising urgency of transmission profile, wherein the urgency of transmission profile includes an additional quality of service (QoS) information of the user data, the first packet data message and the second packet data message are reordered according to the urgency of transmission profile, if the first connection information differs from the second connection information, by first delivering the packet data unit message comprising higher urgency of transmission profile.

8.   A method according to claim 7, wherein said first and second user data comprising urgency of transmission profile, wherein the urgency of transmission profile includes an additional quality of service (QoS) information of the user data, the first packet data unit (PDU) message and the second packet data unit (PDU) message are reordered according to the urgency of transmission profile, if the first connection information is equal to the second connection information, by first delivering the packet data unit (PDU) message comprising higher urgency of transmission profile using other connection information.

9.   A method according to claim 8, wherein the method comprises further steps:

-       the step of reordering further comprises buffering said second packet data messages into a packet data transfer queue for a period of time said first packet data message transfer is on-going, and

-       the step of delivering further comprises delivering said second packet data messages after said first packet data message delivery is completed.

10.   A method according to claim 9, wherein the wireless packet data network is comprised of a General Packet Radio Service (GPRS) network, wherein said first packet data messages and said second packet data messages are Logical Link Controller (LLC) packet data unit (PDU) messages, and where the protocol activation message activates a GPRS Mobility Management (GMM) unit to associate the packet data protocol (PDP) context to said first packet data messages and to said second packet data messages.

11.   A method according to claim 10, wherein a Logical Link Controller (LLC) unit assigns a first Service Access Point Indicator (SAPI) of a GPRS Mobility Management (GMM) unit to associate said first connection information of said first packet data message, and a second Service Access Point Indicator (SAPI) of a GPRS Mobility Management (GMM) unit to associate said second connection information of said second packet data message; said first SAPI value being different than said second SAPI value.

12.   A method according to claim 11, wherein said first packet data message and said second packet data message are reordered according to said first SAPI value and said second SAPI value.

13.   A method according to claim 12, wherein a Radio Link Control/Medium Access Control (RLC/MAC) unit reorders said first packet data message and said second packet data message according to said first SAPI value and said second SAPI value.

14.   A method according to claim 13, wherein a Radio Link Control/Medium Access Control (RLC/MAC) unit reads a used SAPI value of the Logical Link Controller (LLC) packet data unit (PDU) message from the LLC PDU message.

15.   A method according to claim 14, wherein after sending the last LLC PDU message carrying high priority urgency of transmission profile the Radio Link Control/Medium Access Control (RLC/MAC) unit initiates transmitting LLC PDU messages not carrying high priority urgency of transmission profile.

16.   A method according to claim 14, wherein after sending the last LLC PDU message carrying high priority urgency of transmission profile the Radio

Link Control/Medium Access Control (RLC/MAC) unit starts a timer with a predetermined timeout value and after said timeout value, said RLC/MAC unit initiates transmitting LLC PDU messages not carrying high priority urgency of transmission profile if said RLC/MAC unit has not received a new LLC PDU message carrying
5   high priority urgency of transmission profile during said predetermined timeout value.

17.   A method according to claim 14, wherein during transmitting LLC PDU messages not carrying high priority urgency of transmission profile the Radio Link Control/Medium Access Control (RLC/MAC) unit interrupts said transmission
10 if said RLC/MAC unit receives a new LLC PDU message carrying high priority urgency of transmission profile during said transmission, and said RLC/MAC unit initiates transmitting said new LLC PDU message carrying high priority urgency of transmission profile.

18.   A method according to claim 17, wherein said RLC/MAC unit
15 buffers said LLC PDU messages not carrying high priority urgency of transmission profile by generating a LLC PDU border into the Radio Link Control (RLC) data block.

19.   A method according to claim 17, wherein during transmitting LLC PDU message with SAPI value 7 not carrying high priority urgency of transmission
20 profile, the Radio Link Control/Medium Access Control (RLC/MAC) unit interrupts said transmission if said RLC/MAC unit receives a new LLC PDU message with SAPI value 3 carrying high priority urgency of transmission profile during said transmission, said RLC/MAC unit buffers said LLC PDU message with SAPI value 7 not carrying high priority urgency of transmission profile and initiates transmit-
25 ting said new LLC PDU message with SAPI value 3 carrying high priority urgency of transmission profile.

20.   A method according to claim 11, wherein a Radio Link Control/Medium Access Control (RLC/MAC) unit initiates an uplink Temporary Block Flow (TBF) and indicates to a Radio Link Control/Medium Access Control
30 (RLC/MAC) of the network if a RLC ACK or a RLC UNACK mode is to be used when transmitting packet data messages.

21.   A method according to claim 20, wherein Radio Link Control/Medium Access Control (RLC/MAC) of the mobile station (MS) orders said

first packet data message to be delivered in the RLC UNACK mode and said second packet data to be delivered in the RLC ACK mode.

22.   A method according to claim 9, wherein the step of receiving comprises a preliminary step of checking that said first packet data messages and said second packet data messages are received in-sequence order according to a window number inside a Logical Link Control (LLC) header of said first packet data message or said second packet data message.

23.   A mobile station (MS) for transferring user data in a wireless packet data network, the mobile station (MS) comprising a transceiver for transmitting and receiving packet data messages, wherein the mobile station (MS) comprises:

-     a controller configured to generate packet data protocol (PDP) context activation messages for informing the network about the activation of packet data protocol (PDP) contexts for user data transmission, and

-     a layered transmission protocol arrangement comprising a certain protocol layer entity as well as higher protocol layer entities, of which said certain protocol layer entity is configured to receive packet data messages belonging to different packet data protocol (PDP) contexts from at least one upper protocol layer, to reorder packet data messages received from at least one upper protocol layer according to a relative urgency of transmission of packet data protocol (PDP) contexts that the packet data messages belong to, and to deliver packet data messages further from said certain protocol layer in reordered order.

24.   A mobile station (MS) according to claim 23, wherein the controller requests an uplink Temporary Block Flow (TBF) for transmitting said packet data protocol (PDP) context activation messages.

25.   A mobile station (MS) according to claim 24, wherein the controller, during reception, is arranged to check that said first packet data messages and said second packet data messages are received in-sequence order according a connection information of said first packet data message or said second packet data message.

26.   A mobile station (MS) according to claim 25, wherein said first packet data message containing first user data is arranged to belong to said packet

data protocol (PDP) context and said second packet data unit (PDU) message containing second user data is arranged to belong to said packet data protocol (PDP) context.

27.　　　A mobile station (MS) according to claim 26, wherein said first and second user data comprising urgency of transmission profile, wherein the urgency of transmission profile includes an additional quality of service (QoS) information of the user data, the first packet data message and the second packet data message are arranged to be reordered according to the urgency of transmission profile, if the first connection information differs from the second connection information, by first delivering the packet data unit message comprising higher urgency of transmission profile.

28.　　　A mobile station (MS) according to claim 27, wherein said first and second user data comprising urgency of transmission profile, wherein the urgency of transmission profile includes an additional quality of service (QoS) information of the user data, the first packet data unit (PDU) message and the second packet data unit (PDU) message are arranged to be reordered according to the urgency of transmission profile, if the first connection information is equal to the second connection information, by first delivering the packet data unit (PDU) message comprising higher urgency of transmission profile using other connection information.

29.　　　A mobile station (MS) according to claim 28, wherein the layered transmission protocol arrangement is arranged to buffer said second data messages into a packet data transfer queue for a period of time said first packet data message transfer is on-going, and to deliver said second packet data messages after said first packet data delivery is completed.

30.　　　A mobile station (MS) according to claim 29, wherein the wireless packet data network is arranged to comprise of a General Packet Radio Service (GPRS) network, wherein said first packet data messages and said second packet data messages are Logical Link Controller (LLC) packet data unit (PDU) messages, and where the protocol activation message is arranged to activate a GPRS Mobility Management (GMM) unit to associate the packet data protocol (PDP) context to said first packet data messages and to said second packet data messages.

31.　　　A mobile station (MS) according to claim 30, wherein a Logical Link Controller (LLC) unit is arranged to assign a first Service Access Point Indicator (SAPI) of a GPRS Mobility Management (GMM) unit to be associated to said

first connection information of said first packet data message, and a second Service Access Point Indicator (SAPI) of a GPRS Mobility Management (GMM) unit to be associated to said second connection information of said second packet data message; said first SAPI value being different than said second SAPI value.

32.   A mobile station (MS) according to claim 31, wherein said layered transmission protocol arrangement is arranged to reorder said first packet data message and said second packet data message according to said first SAPI value and said second SAPI value.

33.   A mobile station (MS) according to claim 31, wherein a Radio Link Control/Medium Access Control (RLC/MAC) unit is arranged to reorder said first packet data message and said second packet data message according to said first SAPI value and said second SAPI value.

34.   A mobile station (MS) according to claim 33, wherein a Radio Link Control/Medium Access Control (RLC/MAC) unit is arranged to read a used SAPI value of the Logical Link Controller (LLC) packet data unit (PDU) message from the LLC PDU message.

35.   A mobile station (MS) according to claim 34, wherein after sending the last LLC PDU message carrying high priority urgency of transmission profile the Radio Link Control/Medium Access Control (RLC/MAC) unit is arranged to initiate transmitting LLC PDU messages not carrying high priority urgency of transmission profile.

36.   A mobile station (MS) according to claim 34, wherein after sending the last LLC PDU message carrying high priority urgency of transmission profile, the Radio Link Control/Medium Access Control (RLC/MAC) unit is arranged to start a timer with a predetermined timeout value and after said timeout value, said RLC/MAC unit is arranged to initiate transmitting LLC PDU messages not carrying high priority urgency of transmission profile if said RLC/MAC unit has not received a new LLC PDU message carrying high priority urgency of transmission profile during said predetermined timeout value.

37.   A mobile station (MS) according to claim 34, wherein during transmitting LLC PDU messages not carrying high priority urgency of transmission profile, the Radio Link Control/Medium Access Control (RLC/MAC) unit is arranged to interrupt said transmission if said RLC/MAC unit receives a new LLC PDU message carrying high priority urgency of transmission profile during said

transmission, and said RLC/MAC unit is arranged to initiate transmitting said new LLC PDU message carrying high priority urgency of transmission profile.

38. A mobile station (MS) according to claim 37, wherein said RLC/MAC unit is arranged to buffer said LLC PDU messages not carrying high priority urgency of transmission profile by generating a LLC PDU border into the Radio Link Control (RLC) data block.

39. A mobile station (MS) according to claim 37, wherein during transmitting LLC PDU message with SAPI=7 not carrying high priority urgency of transmission profile, the Radio Link Control/Medium Access Control (RLC/MAC) unit is arranged to interrupt said transmission if said RLC/MAC unit receives a new LLC PDU message with SAPI=3 carrying high priority urgency of transmission profile during said transmission, said RLC/MAC unit is arranged to buffer said LLC PDU message with SAPI=7 not carrying high priority urgency of transmission profile and to initiate transmitting said new LLC PDU message with SAPI=3 carrying high priority urgency of transmission profile.

40. A mobile station (MS) according to claim 31, wherein a Radio Link Control/Medium Access Control (RLC/MAC) unit is arranged to initiate an uplink Temporary Block Flow (TBF) and arranged to indicate to a Radio Link Control/Medium Access Control (RLC/MAC) of the network if a RLC ACK or a RLC UNACK mode is to be used when transmitting packet data messages.

41. A mobile station (MS) according to claim 40, wherein Radio Link Control/Medium Access Control (RLC/MAC) is arranged to order said first packet data message to be delivered in the RLC UNACK mode and said second packet data to be delivered in the RLC ACK mode.

42. A mobile station (MS) according to claim 29, wherein the controller, during reception, is arranged to check that said first packet data messages and said second packet data messages are received in-sequence order according a window number inside a Logical Link Control (LLC) header of said first packet data message or said second packet data message.

43. A method related to a network element of a wireless network for transferring user data between a mobile station (MS) and a wireless packet data network, the method comprising the steps of:

- at a certain protocol layer, receiving a first packet data message from an upper protocol layer, which first packet data message belongs to a first packet data protocol (PDP) context characterised by certain first connection information,

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- at said certain protocol layer, receiving a second packet data message from an upper protocol layer, which second packet data message belongs to a second packet data protocol (PDP) context characterised by certain second connection information,

- reordering said first packet data message and said second packet data
10 message at said certain protocol layer according to a relative urgency of transmission of said first and second packet data protocol (PDP) contexts, and

- delivering said first packet data message and said second data message further from said certain protocol layer in reordered order.

15 44. A method according to claim 43, wherein in the steps of receiving said first packet data message and said second packet data message precede a step of configuring comprising further step of receiving packet data protocol (PDP) context activation messages for the activation of packet data protocol (PDP) contexts for user data transmission.

20 45. A method according to claim 44, wherein the steps of receiving said first packet data message and said second packet data message comprise a preliminary step of checking that said first packet data messages and said second packet data messages are received in-sequence order according said connection information of said first packet data message or said second packet data message.

25 46. A method according to claim 45, wherein the first packet data message containing first user data belongs to first packet data protocol (PDP) context, and the second packet data message containing second user data belongs to second packet data protocol (PDP) context.

47. A method according to claim 46, wherein said first and second user
30 data comprising urgency of transmission profile, wherein the urgency of transmission profile includes an additional quality of service (QoS) information of the user data, the first packet data message and the second packet data message are reordered according to the urgency of transmission profile, if the first connection infor-

mation differs from the second connection information, by first delivering the packet data unit message comprising higher urgency of transmission profile.

48.   A method according to claim 47, wherein said first and second user data comprising urgency of transmission profile, wherein the urgency of transmis-
5   sion profile includes an additional quality of service (QoS) information of the user data, the first packet data unit (PDU) message and the second packet data unit (PDU) message are reordered according to the urgency of transmission profile, if the first connection information is equal to the second connection information, by first delivering the packet data unit (PDU) message comprising higher urgency of
10   transmission profile using other connection information.

49.   A method according to claim 48, wherein the method comprises further steps:

-     the step of reordering further comprises buffering said second packet data messages into a packet data transfer queue for a period of time said
15   first packet data message transfer is on-going, and

-     the step of delivering further comprises delivering said second packet data messages after said first packet data message delivery is completed.

50.   A method according to claim 49, wherein a Logical Link Controller (LLC) unit assigns a first Service Access Point Indicator (SAPI) of a GPRS Mobil-
20   ity Management (GMM) unit to associate said first connection information of said first packet data message, and a second Service Access Point Indicator (SAPI) of a GPRS Mobility Management (GMM) unit to associate said second connection information of said second packet data message; said first SAPI value being different than said second SAPI value.

25   51.   A method according to claim 50, wherein said first packet data message and said second packet data message are reordered according to said first SAPI value and said second SAPI value.

52.   A method according to claim 51, wherein a Radio Link Control/Medium Access Control (RLC/MAC) unit reorders said first packet data mes-
30   sage and said second packet data message according to said first SAPI value and said second SAPI value.

53. A method according to claim 52, wherein a Radio Link Control/Medium Access Control (RLC/MAC) unit reads a used SAPI value of the Logical Link Controller (LLC) packet data unit (PDU) message from the LLC PDU message.

54. A method according to claim 53, wherein after sending the last LLC PDU message carrying high priority urgency of transmission profile the Radio Link Control/Medium Access Control (RLC/MAC) unit initiates transmitting LLC PDU messages not carrying high priority urgency of transmission profile.

55. A method according to claim 53, wherein after sending the last LLC PDU message carrying high priority urgency of transmission profile the Radio Link Control/Medium Access Control (RLC/MAC) unit starts a timer with a predetermined timeout value and after said timeout value, said RLC/MAC unit initiates transmitting LLC PDU messages not carrying high priority urgency of transmission profile if said RLC/MAC unit has not received a new LLC PDU message carrying high priority urgency of transmission profile during said predetermined timeout value.

56. A method according to claim 53, wherein during transmitting LLC PDU messages not carrying high priority urgency of transmission profile the Radio Link Control/Medium Access Control (RLC/MAC) unit interrupts said transmission if said RLC/MAC unit receives a new LLC PDU message carrying high priority urgency of transmission profile during said transmission, and said RLC/MAC unit initiates transmitting said new LLC PDU message carrying high priority urgency of transmission profile.

57. A method according to claim 56, wherein said RLC/MAC unit buffers said LLC PDU messages not carrying high priority urgency of transmission profile by generating a LLC PDU border into the Radio Link Control (RLC) data block.

58. A method according to claim 56, wherein during transmitting LLC PDU message with SAPI value 7 not carrying high priority urgency of transmission profile, the Radio Link Control/Medium Access Control (RLC/MAC) unit interrupts said transmission if said RLC/MAC unit receives a new LLC PDU message with SAPI value 3 carrying high priority urgency of transmission profile during said transmission, said RLC/MAC unit buffers said LLC PDU message with SAPI value 7 not carrying high priority urgency of transmission profile and initiates transmit-

ting said new LLC PDU message with SAPI value 3 carrying high priority urgency of transmission profile.

59.   A method according to claim 50, wherein a Radio Link Control/Medium Access Control (RLC/MAC) unit notifies the indication from the mobile station (MS) if a RLC ACK or a RLC UNACK mode is to be used when transmitting packet data messages.

60.   A method according to claim 59, wherein Radio Link Control/Medium Access Control (RLC/MAC) of the mobile station (MS) orders said first packet data message to be delivered in the RLC UNACK mode and said second packet data to be delivered in the RLC ACK mode.

61.   A method according to claim 49, wherein the step of transferring comprises a preliminary step of checking that said first packet data messages and said second packet data messages are received in-sequence order according to a window number inside a Logical Link Control (LLC) header of said first packet data message or said second packet data message.

62.   A method according to claim 43, wherein the network element is one of the following network elements: a Serving General Packet Radio Support Node (SGSN), a Base Station Controller (BSC), Mobile Switching Center (MSC) and a Packet Control Unit (PCU) comprising a RLC/MAC unit.

63.   A network element of a wireless network for transferring user data between a mobile station (MS) and a wireless packet data network, wherein the network element comprises:

-     a controller configured to generate packet data protocol (PDP) context activation messages for informing the network about the activation of packet data protocol (PDP) contexts for user data transmission, and

-     a layered transmission protocol arrangement comprising a certain protocol layer entity as well as higher protocol layer entities, of which said certain protocol layer entity is configured to receive packet data messages belonging to different packet data protocol (PDP) contexts from at least one upper protocol layer, to reorder packet data messages received from at least one upper protocol layer according to a relative urgency of transmission of packet data protocol (PDP) contexts that the packet data

messages belong to, and to deliver packet data messages further from said certain protocol layer in reordered order.

64.   A network element according to claim 63, wherein the controller receives an uplink Temporary Block Flow (TBF) for configuring said packet data protocol (PDP) context activation messages.

65.   A network element according to claim 64, wherein the controller, during reception, is arranged to check that said first packet data messages and said second packet data messages are received in-sequence order according a connection information of said first packet data message or said second packet data message.

66.   A network element according to claim 65, wherein said first packet data message containing first user data is arranged to belong to said packet data protocol (PDP) context and said second packet data unit (PDU) message containing second user data is arranged to belong to said packet data protocol (PDP) context.

67.   A network element according to claim 66, wherein said first and second user data comprising urgency of transmission profile, wherein the urgency of transmission profile includes an additional quality of service (QoS) information of the user data, the first packet data message and the second packet data message are arranged to be reordered according to the urgency of transmission profile, if the first connection information differs from the second connection information, by first delivering the packet data unit message comprising higher urgency of transmission profile.

68.   A network element according to claim 67, wherein said first and second user data comprising urgency of transmission profile, wherein the urgency of transmission profile includes an additional quality of service (QoS) information of the user data, the first packet data unit (PDU) message and the second packet data unit (PDU) message are arranged to be reordered according to the urgency of transmission profile, if the first connection information is equal to the second connection information, by first delivering the packet data unit (PDU) message comprising higher urgency of transmission profile using other connection information.

69.   A network element according to claim 68, wherein said layered transmission protocol arrangement is arranged to buffer said second data messages into a packet data transfer queue for a period of time said first packet data message transfer is on-going, and to deliver said second packet data messages after said first packet data delivery is completed.

70. A network element according to claim 69, wherein a Logical Link Controller (LLC) unit is arranged to assign a first Service Access Point Indicator (SAPI) of a GPRS Mobility Management (GMM) unit to associate said first connection information of said first packet data message, and a second Service Access Point Indicator (SAPI) of a GPRS Mobility Management (GMM) unit to associate said second connection information of said second packet data message; said first SAPI value being different than said second SAPI value.

71. A network element according to claim 70, wherein the layered transmission protocol arrangement is arranged to reorder said first packet data message and said second packet data message according to said first SAPI value and said second SAPI value.

72. A network element according to claim 71, wherein a Radio Link Control/Medium Access Control (RLC/MAC) unit is arranged to reorder said first packet data message and said second packet data message according to said first SAPI value and said second SAPI value.

73. A network element according to claim 72, wherein a Radio Link Control/Medium Access Control (RLC/MAC) unit is arranged to read a used SAPI value of the Logical Link Controller (LLC) packet data unit (PDU) message from the LLC PDU message.

74. A network element according to claim 73, wherein after sending the last LLC PDU message carrying high priority urgency of transmission profile the Radio Link Control/Medium Access Control (RLC/MAC) unit is arranged to initiate transmitting LLC PDU messages not carrying high priority urgency of transmission profile.

75. A network element according to claim 73, wherein after sending the last LLC PDU message carrying high priority urgency of transmission profile the Radio Link Control/Medium Access Control (RLC/MAC) unit is arranged to start a timer with a predetermined timeout value and after said timeout value, said RLC/MAC unit initiates transmitting LLC PDU messages not carrying high priority urgency of transmission profile if said RLC/MAC unit has not received a new LLC PDU message carrying high priority urgency of transmission profile during said predetermined timeout value.

76. A network element according to claim 73, wherein during transmitting LLC PDU messages not carrying high priority urgency of transmission profile

the Radio Link Control/Medium Access Control (RLC/MAC) unit is arranged to interrupt said transmission if said RLC/MAC unit receives a new LLC PDU message carrying high priority urgency of transmission profile during said transmission, and said RLC/MAC unit initiates transmitting said new LLC PDU message carrying high priority urgency of transmission profile.

77.   A network element according to claim 76, wherein said RLC/MAC unit is arranged to buffer said LLC PDU messages not carrying high priority urgency of transmission profile by generating a LLC PDU border into the Radio Link Control (RLC) data block.

78.   A network element according to claim 76, wherein during transmitting LLC PDU message with SAPI value 7 not carrying high priority urgency of transmission profile, the Radio Link Control/Medium Access Control (RLC/MAC) unit is arranged to interrupt said transmission if said RLC/MAC unit receives a new LLC PDU message with SAPI value 3 carrying high priority urgency of transmission profile during said transmission, said RLC/MAC unit buffers said LLC PDU message with SAPI value 7 not carrying high priority urgency of transmission profile and initiates transmitting said new LLC PDU message with SAPI value 3 carrying high priority urgency of transmission profile.

79.   A network element according to claim 70, wherein a Radio Link Control/Medium Access Control (RLC/MAC) unit is arranged to notify the indication from the mobile station (MS) if a RLC ACK or a RLC UNACK mode is to be used when transmitting packet data messages.

80.   A network element according to claim 79, wherein Radio Link Control/Medium Access Control (RLC/MAC) is arranged to order said first packet data message to be delivered in the RLC UNACK mode and said second packet data to be delivered in the RLC ACK mode.

81.   A network element according to claim 69, wherein the controller, during reception, is arranged to check that said first packet data messages and said second packet data messages are received in-sequence order according to a window number inside a Logical Link Control (LLC) header of said first packet data message or said second packet data message.

82.   A network element according to claim 63, wherein the network element is arranged to be one of the following network elements: a Serving General Packet Radio Support Node (SGSN), a Base Station Controller (BSC), Mobile

Switching Center (MSC) and a Packet Control Unit (PCU) comprising a RLC/MAC unit.